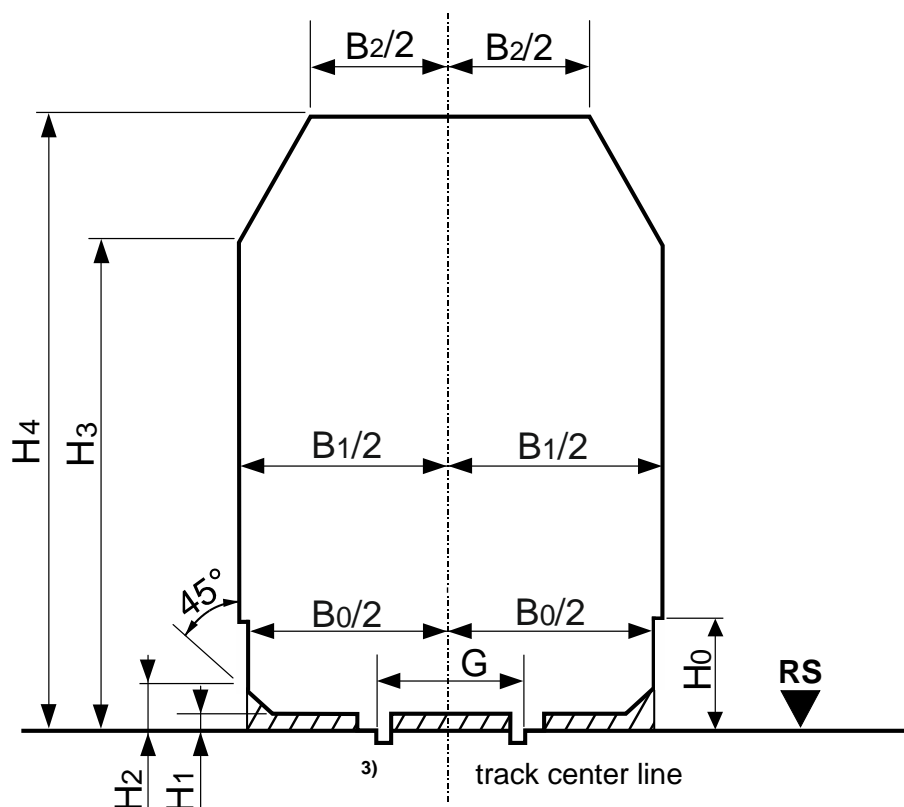


The depicted vehicle perimeters apply to replications of European normal and wide gauge vehicles. Enlarged profiles for special vehicle widths, heights or loading systems that are not generally used in Europe and enlarged profiles for wide-track vehicles are not covered by this standard.

The perimeters depict an envelope, or convex hull, within which, on an ideal track, a vehicle must remain at all times, given its movement capabilities under any play and tolerances of parts and construction<sup>1)</sup>.

Models of prototypical vehicles should be built as true to scale as possible. In all cases, all vehicle parts, including lowered pantographs<sup>2)</sup>, should remain within the specified perimeter.

Functional elements for power pickup, securing or decoupling mechanisms, and similar components may extend into the hatched area above the rail surface.



**Dimension Table:**

Gauge	G	$B_0$	$B_1$	$B_2$	$H_0$	$H_1$	$H_2$	$H_3$	$H_4$
Z	6.5	16	17	11	5.5	1	1.5	17	22
N	9.0	22	23	15	7.5	1	2.5	24	30
TT	12.0	29	30	20	10	1.5	3.5	32	40
H0	16.5	39	40	27	13.5	2	4.5	44	55
S	22.5	53	54	37	18	3	6.5	59	74
0	32.0	76	78	52	26	4	9	83	106
I	45.0	106	110	73	36.5	5	11	115	147
II	64.0	149	153	103	52	6	18	163	209

- 1) The definition as a kinematic boundary only applies to new constructions of vehicles. Vehicles developed before the publishing of this edition are considered as standards compliant if they meet the table dimensions statically, e.g. as measured directly on the vehicle body.
- 2) On the limitations of the working space of pantographs, see NEM 202.
- 3) The wheel regions in area  $H_1$  and below **RS** are specified in NEM 310.

The width dimensions listed in the table do not apply without restriction to the dimensioning of the vehicles.

In addition to the extensions according to NEM 103 and the track spacing increases according to NEM 112, a limitation of the maximum vehicle width (in the middle of the vehicle) depending on the vehicle length is required for running in curved tracks.

For this purpose, the vehicles are divided into three groups <sup>4)</sup>:

Vehicle group A: Bogie pivot spacing up to 14.0 m <sup>5)</sup> (mostly with box length up to 20.0 m), width up to 3.15 m <sup>6)</sup>

Vehicle group B: Bogie pivot spacing up to 17.2 m (mostly with box length up to 24.2 m), width up to 3.05 m

Vehicle group C: Bogie pivot spacing up to 19.5 m (mostly with box length up to 27.2 m), width up to 2.95 m

The actual vehicle width at the vehicle ends must be dimensioned in such a way that it does not exceed the curve extension to the outside in accordance with NEM 103 for its vehicle group. If necessary, a vehicle must be assigned to a longer group.

The **limiting dimensions for effective bogie pivot spacing** correspond to the following model dimensions:

Scale	Z	N	TT	H0	S	0	I	II
Vehicle Group A	64	88	117	161	219	311	438	622
Vehicle Group B	78	108	143	198	267	382	538	764
Vehicle Group C	89	122	163	224	305	433	609	867

The **limiting dimensions for box width** correspond to the following model dimensions:

Scale	Z	N	TT	H0	S	0	I	II
Vehicle Group A	14.5	19.5	26.5	36	49	70	98.5	140
Vehicle Group B	14	19	25.5	35	47.5	67.5	95	135.5
Vehicle Group C	13.5	18.5	24.5	34	46	65.5	92	131

4) Models shortened in a way that deviates from the scale reproduction can be assigned to a smaller vehicle group if necessary. In this case, the dimensions of the fictitious shortened prototype shall be used as the allocation size.

5) Also applies to single wheelsets.

6) For vehicles of nominal size 0, the conversion of the maximum vehicle width dimension of group A of 3.15 m in the deviating scale of 1:43.5 is not permitted.